Study Guide: Circulation of the Heart

The heart is the pump of the body. The heart takes blood from the body brings it to the lungs, oxygenate the blood and distributes back to the body.



**The red lines show deoxygenated blood, where the blue is oxygenated blood.

**This diagram shows the heart backwards if you must, left and right are from the readers perspective not the perspective of the patient. The posterior view.

1. **Superior Vena Cava** and **Inferior Vena Cava** is blood that comes from the blood and into the Right Atrium, this blood coming from the body is deoxygenated. The oxygen circulated through the body, the oxygen is used to provide the rest of the skin, organs, and others with the oxygen.

Superior Vena Cava is from the head, neck, and chest.

Inferior Vena Cava is brought from the lower trunk, and lower limbs.

2. Right Atrium, blood is pumped from the body to this chamber.

3. **Right Atrioventricular Valve** or **Tricuspid**, during what is heard as "Lub-Dub", during the "Lub" the Tricuspid, 3 cuspid valves open allowing the atrium blood to flow into the Right Ventricle. When the valves close this makes sure regurgitation does not occur back into the atrium.

Try to keep them right. "Tri- to keep them right". The tricuspid is on the right side.

4. **Right Ventricle,** the chamber that receives blood from the Right Atrium.

5. **Pulmonary Valves**, open from the Right Ventricle bringing the blood into **Pulmonary Trunk**. This occurs during "Dub" portion of the heartbeat.

6. Pulmonary Trunk divides into Left and Right Pulmonary Arteries and this enters the Lungs.

It's in the lungs where the blood becomes oxygenated, through inspiration and expiration.

7. Left Pulmonary Vein and Right Pulmonary Vein, from the lungs and deliveries the oxygenated blood to the Left Atrium

8. Left Atrium, receives blood from the lungs.

9. Left Atrioventricular Valve or Bicuspid or Mitral Valve, during what is heard as "Lub-Dub", during the "Lub" the Bicuspid, 2 cuspid valves open allowing the atrium blood to flow into the Left Ventricle. When the valves close this makes sure regurgitation does not occur back into the atrium.

10. **Left Ventricle**, the blood flows from the left atrium. The left ventricle and the right ventricle hold the same volume, even though the walls of the left ventricle are thicker than the right ventricle. This gives the heart a better pump to the rest of the body.

11. Aortic valve or Aortic Semilunar Valve, the valve opens into the ascending aorta. This occurs during the "Dub" portion of the heartbeat.

12. Ascending Aorta, the aortic valve opens up into ascending aorta, this than turns into the Aortic Arch, then into the Descending Aorta, at this point this begins to divide into the major and minor arteries and capillaries.